



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/215,630	12/16/1998	JANE JIN	CISCO-0650	7147

THELEN REID & PRIEST LLP  
P.O. BOX 640640  
SAN JOSE, CA 95164

EXAMINER

TRAN, PHUC H

ART UNIT PAPER NUMBER

2666

DATE MAILED: 01/28/2004

27

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/215,630

Applicant(s)

JIN ET AL.

Examiner

PHUC H TRAN

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 12-22, 31-38 and 42-44 is/are rejected.
- 7) ☒ Claim(s) 9-11, 23-30 and 39-41 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This communication is in response to the applicant's response filed 11/6/2003.

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. Claims 1-8, 12-22 & 31-44 are pending in the application. Detailed action is followed:

#### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8, 12-22, 31-38 & 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (U.S. Patent No. 6282575 B1) and Lemaire et al. (U.S. Patent No. 6208149 B1) in further view of Martin (U.S. Patent No. 6154776).

- With respect to claims 1-2, 4, 31-35 & 42-44, Lin teaches a method and apparatus for routing management in a network, which interpreted as a user in a data communications network, which comprises: obtaining a user service profile for the user in response to a user log-in attempt to a service selection gateway (block 202, 204 in Fig. 3); routing all packets originated by the user through the SSG during the session and passing the packets on to the data communications network (block 214 in Fig. 3). Lin fails to teach setting the QoS bits accordance with the QoS level for the user. Lemaire teaches setting the QoS information in header, which is interpreted as

Art Unit: 2666

inserting bit into header, for data units that are associated with a flow (col. 1, lines 30-41), for guarantee the quality of service and connection to the user. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the QoS method in Lemaire's invention into Lin for protecting the connection of the user in network and guarantee for the quality of service with the user. Lin also fails to teach the user service profile including a QoS level. Martin teaches the user profile including the QoS level (col. 11, lines 13-27) for providing service level for each user in different level. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to utilize the user's QoS profile into Lin for controlling the communication and satisfaction the user's request.

- With respect to claim 3, Lin teaches a method and apparatus for providing computer network, which interpreted as a method of setting a user in a data communications network, which comprises: initiating a request to an authentication, authorization and accounting server in response to the user's attempt to log-in (block 202, 204 in Fig. 3); receiving, in response to the request, a user service profile corresponding to the user (steps 204-208 in Fig. 3). Lin fails to teach the user service profile including a Quality of Service field and using the Quality of Service field to set QoS bits within packets transmitted by the user. Lemaire teaches the user service profile including a Quality of Service field (e.g. the QoS information in the header of packet) and using the Quality of Service field to set QoS bits within packets transmitted by the user (col. 1, lines 30-41) for protection error and guarantee of connection for user. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was

Art Unit: 2666

made to implement the method of QoS in Lemaire's invention into Lin for guarantee the connection of user to the network and protection the error.

- With respect to claim 5, Lin teaches a method and apparatus for providing computer network, which is interpreted as a method of setting a user in a data communications network, which comprises: at a service selection gateway (block 104 in Fig. 2) to which the user is in communication a request from the user to communicate (step 200 in Fig. 3); and transmitting the packets belonging to the at least one packet flow to the data communications network (e.g. the packets are allowed to communicate with network). Lin fails to teach setting the QoS bits and assigning a particular Quality of Service level to at least one packet flow transmitted by the user within packets belonging to the at least one packet flow received at the service selection gateway in accordance with the Quality of Service level. Lemaire teaches setting the QoS information in header, which is interpreted as inserting bit into header, for data units that are associated with a flow (col. 1, lines 30-41) for controlling protecting in the communication and guarantee the service for the user. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the method of QoS in Lemaire's invention into Lin for guarantee the connection of user to the network and protection the error.

- With respect to claims 6, 15-16, & 36, Lin discloses wherein all the packets of the at least one packet flow in an IP packet (e.g. the packet in Lin's invention).

- With respect to claims 7, 17-18, & 37, Lin and Lemaire fail to explicitly teach wherein the QoS bits are the precedence bits within the ToS/Differentiated Services field of the IP packets, but it is inherently to a person of ordinary skill in the art at the time of the invention was made to know the QoS bits are in the ToS/Differentiated Services field of the IP packet.

- With respect to claims 8 & 38, Lin teaches communicating between the service selection gateway and an AAA server the request (e.g. Fig. 2 shows the communication between the 102 and 104).

- With respect to claims 12 & 19, Lin discloses an apparatus communications system, which comprises: a service selection gateway (104 in Fig. 2) in communication with the user (108 in Fig. 2), the SSG also in communication with an authentication, authorization and accounting (102 in Fig. 2) server, the SSG receiving a user service profile from the AAA server in response to an attempt to log-in by the user (block 204 in Fig. 3); and a packet modifier associated with the SSG (e.g. the packets is modified at network access server). Lin fails to teach setting the QoS bits of packets. Lemaire teaches setting the QoS variables for data units that are associated with a flow (col. 1, lines 30-41) for guarantee the quality of service and connection to the user. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to implement the QoS method in Lemaire's invention into Lin for protecting the connection of the user in network and guarantee for the quality of service with the user.

- With respect to claims 13, 14, & 21, Lin discloses wherein all packets transmitted by the user to the data communications network via the SSG are modified (e.g. Fig. 2 shows the transmitting by the user to the data communications network).

- With respect to claims 20 & 22, Lin fails to teach wherein the QoS bit field is set to a value specified in the QoS request. Lemaire teaches setting the QoS variables for data units that are associated with a flow (col. 1, lines 30-41) for guarantee of communication and protection the quality of connection in the data network. Therefore, it would have been obvious to a person

Art Unit: 2666

of ordinary skill in the art at the time of the invention was made to implement the QoS bits with setting to the value specified in the QoS request in the packet for protecting and guaranteeing the communication during of congestion.

***Allowable Subject Matter***

3. Claims 9-11, 23-30, & 39-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

4. Applicant's arguments filed 11/6/03 have been fully considered but they are not persuasive.

- Applicant's argument that the network access server only receives authentication results from an authentication server but no other information during the validation process (page 17). It is not teaching in the claim invention.

Examiner respectfully disagrees. In col. 4, lines 43-46, Lin teaches the authentication sever also logs all request for connections for accounting purposes, therefore the authentication server not only send the validation information but also have the accounting purposes.

- Applicant's argument that Lin does not teach receiving a request from the user (page 19). Examiner respectfully disagrees. Lin teaches the client initiates communication

Art Unit: 2666

with network access server, therefore the initiation is considered as the requesting step.

*Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See form PTO-892.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H TRAN whose telephone number is (703) 308-7471. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on (703) 308-5463. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 872-9314.

Phuc Tran  
Assistant Examiner  
Art Unit 2664

P.t  
January 21, 2004

  
DANG TON  
PRIMARY EXAMINER